

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A cutting unit, comprising:

a pair of cylinders disposed opposite one another with a gap formed there-between for receiving a ribbon on a travel path, said pair of cylinders including a first cutting cylinder having a periphery with a cutting knife disposed helically about said periphery and a second cylinder;

one drive rotating said first cutting cylinder at a speed proportional to the speed of the ribbon for cutting the ribbon and providing a signature cut from the ribbon with a smooth, straight edge;

a subframe having a pivot point, said subframe being pivotable about said pivot point, said subframe supporting said cylinders, and said subframe controlling a position of said cylinders in regard to the ribbon and therefore controlling a cutting length of the ribbon;

a further drive connected to said subframe for pivoting said subframe about said pivot point;

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a control unit connected to and controlling said further drive and said one drive for controlling a rotational speed of said first cutting cylinder; and

for a given press speed, said control unit causing said cylinders to be rotated faster and decreasing an angle of said cylinders relative to the ribbon, in order to increase the cutting lengths of the ribbon.

~~a sensor disposed in the travel path of the ribbon and monitoring the cutting operation of the ribbon; said sensor connected to said control unit, and said sensor providing control signals to said control unit for controlling operation of said cylinders.~~

Claims 2 - 4. (cancelled).

Claim 5. (previously presented) The cutting unit according to claim 1, wherein said one drive is a first drive, and including a second drive rotating and mounting said second cylinder, said first drive and said second drive are supported by said subframe.

Claim 6. (cancelled).

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Claim 7. (previously presented) The cutting unit according to claim 1, wherein said one drive is a first drive, a second drive rotates and mounts said second cylinder, and said first drive and said second drive are motors.

Claim 8. (previously presented) The cutting unit according to claim 1, wherein said one drive is a first drive, a second drive rotates and mounts said second cylinder, and said first drive and said second drive are gears to be driven by motors.

Claim 9. (currently amended) The cutting unit according to claim 6, wherein said cutting unit further includes a sensor ~~is~~-selected from the group consisting of cameras, optical scanners, speed sensors, and position sensors, and said control unit is a microprocessor based control unit.

Claim 10. (currently amended) A folder, comprising:

a frame;

a subframe pivotably mounted in said frame about a pivot point;

one drive housed in said subframe;

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a pair of cylinders supported by said subframe and disposed opposite one another with a gap formed there-between for receiving a ribbon on a travel path, said pair of cylinders including a first cutting cylinder having a periphery with a cutting knife disposed helically about said periphery and a second cylinder, said first cutting cylinder driven by said one drive at a speed proportional to the speed of the ribbon for cleanly cutting the ribbon and providing a signature cut from the ribbon with a smooth, straight edge;

said subframe controlling a position of said cylinders in regard to the ribbon and therefore controlling a cutting length of the ribbon;

a further drive connected to said subframe for pivoting said subframe about said pivot point;

a control unit connected to and controlling said further drive and said one drive for controlling a rotational speed of said first cutting cylinder; and

for a given press speed, said control unit causing said cylinders to be rotated faster and decreasing an angle of said

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cylinders relative to the ribbon, in order to increase the  
cutting lengths of the ribbon.

~~a sensor disposed in the travel path of the ribbon and  
monitoring the cutting operation of the ribbon, said sensor  
connected to said control unit, and said sensor providing  
control signals to said control unit for controlling operation  
of said cylinders.~~

Claim 11. (previously presented) The folder according to  
claim 10, wherein said one drive is a first drive and  
including a second drive rotating and mounting said second  
cylinder, said first drive and said second drive rotating said  
cylinders such that a component of travel of a point of  
contact between said cylinders in a direction of travel of the  
ribbon matches a speed of the ribbon for cutting the ribbon in  
a straight line.

Claims 12 - 21. (cancelled).

Claim 22. (currently amended) The cutting unit according to  
claim 1, wherein ~~said sensors provide at least one sensor~~  
provides control signals to said control unit to maintain an  
acceptable cut of the ribbon by adjustment of the rotational

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speed of said cylinder drives, or by adjustment of said further drive pivoting said subframe.

Claim 23. (currently amended) The cutting unit according to claim 1, wherein ~~said sensors detect~~ at least one sensor detects an unacceptable cut of the ribbon, and said control unit adjusts the rotational speed of the cylinders by adjusting the drives.

Claim 24. (previously presented) The cutting unit according to claim 1, wherein ~~said sensors detect~~ at least one sensor detects an unacceptable cut of the ribbon, and said control unit adjusts the rotational speed of the cylinders by controlling the position of said cutting cylinders.